iTool
Video Borescope

APPLICATIONS

AEROSPACE
Inspect turbines, combustion chambers, low pressure compressors and high pressure compressors, aircraft wings, structures, brakes, other difficult-to-access areas and the location of foreign object damage (FOD).

PETROCHEMICAL
Inspect for pitting, cracking, corrosion, erosion, weld and other defects in condenser tubes, heat exchanger tubes, glass lines vessels, pipelines, steam and gas turbines, pumps, gearboxes, compressors, boilers, headers and valves.

POWER GENERATION
Both fossil and nuclear power plants can inspect vital equipment such as turbines, pipelines, condenser tubes, pumps, boilers, heat exchangers, valves, pressure vessels and other critical plant systems.

PROCESS
Pharmaceutical, chemical, fertilizer, food, health care and electronics industries need to verify that welds on high purity piping were completed properly.

FEATURES

- 4-Way Articulation
- Digital Zoom
- Water Proof
- Video Recording
- Still Image Capture
- SD Card Storage
- Text Annotation
- Voice Recording
- Interchangeable Tips
- Side View Capable
- Interchangeable Probes

ACCESSORIES

- Centering Devices
- Selection of Tip Objectives
- Side View Tip Adapters
- Battery
- Rigid Guide Tubes
- Video Hub Holder

PRIMARY FEATURES

4-WAY ARTICULATION
The iTool offers full articulation in all directions in models up to 7.5 Meters. This allows precise positioning of the video borescope tip to provide the best possible view of the inspection area.

INTERCHANGEABLE VIDEO PROBES
The iTool allows you to change out several different length and diameter video probes on a single system. This means that the perfect probe can always be available for your inspection.

COMPACT AND RUGGED
Easy to transport and set up around industrial plants with little effort due to compact design. Rugged tungsten construction makes the iTool perfect for tough industrial environments.

AFFORDABLE
The iTool is the most affordable industrial grade video borescope inspection system available. There is no need to spend your entire budget on a single instrument.

BRILLIANT 6.8” LCD
Easy to use and perfectly sized high resolution VGA LCD provides perfect image quality with full text, digital recording and file management at the touch of a finger. Files are quickly downloaded with a removable SD card.

AVAILABLE DIAMETER

4mm | 0.157in 6mm | .236in 8mm | .315in

AVAILABLE LENGTH

1.5 to 15M
4.9 to 50Ft

High Resolution Images From A Gas Turbine

FOR MORE INFORMATION

iTool Specifications

OPERATING UNIT

Display Size:	17cm (6.8“) TFT VGA Farbdisplay
Display Resolution:	VGA (640x480 Pixel)
Operating System:	Realtime operating System, with On-Screen-Menu
User Interface:	Direct Action Keys, Function-Keys, Arrow-Keys
Languages:	Englisch, French, Spanish, Italian, German
Video interface:	Composite Video-out, Composite Video-in, S-Video-in
Audioanschluss:	3,5mm jack Audio-in / 3,5mm jack Audio-out
Power Supply, primary:	12V via AC-Adapter
Power Supply, secondary:	12V via Battery Belt

MEASUREMENT

Method:	Comparative Measurement

DOCUMENTATION

Video Format:	AVI (.avi)
Image Format:	BMP (.bmp)
Storage:	SD-HC-Memory Card up to 32GB (FAT32)

CAMERA CONTROL

Image Sensor:	High-Resolution Color SUPER HADTM CCD
Camera Control / Exposure:	Integration modes: Automatic, Short, Long, Manuell
White Balance:	yes, factory default or user defined
AGC-Level:	yes, adjustable
Gamma:	yes, adjustable

IMAGE CONTROL

Zoom:	x3.5 (Digital)
Invert:	horizontal and vertical Image Inversion
Brightness, Contrast, Colour:	yes, adjustable
Text Annotation:	Built-in full screen text overlay generator

ILLUMINATION

Type:	24Watt Metal Halide gas discharge lamp
Illumination Control:	ja, stepless manual aperture
Colour Temperature:	ca. 6000k
Average Lamp Lifetime:	ca. 500h

INTERCHANGABLE VIDEOPROBES

Diameter:	4,0mm	6,0mm	8,0mm
Working Length:	1,5m - 3,0m	1,5m - 7,5m	1,5m - 15m
Articulation:	4-way	4-way	0-way, 2-way, 4-way
Articulation Angle* L/R | U/D:	100°/100° | 100°/100°	100°/100° | 160°/130°	100°/100° | 160°/130°
Integrated Objective Lens:	x	–	–
Interchangeable Objective Lens:	–	x	x
Side View Tip Adapter:	o (**only with 60° FOV)	x	x
Braid:	Tungsten Braid on PU-Jacket		

CONSTRUCTION

System Weight:	2,25kg (4,96lb) Operating Unit iTool / 9,2kg (20lb) inkl. Sonde & Koffer
Dimensions:	290mm x 190mm x 70mm
Housing:	rugged PU
Frame:	Alloy
Protection Class:	IP53

OPERATING ENVIRONMENT

Tip Operating Temperature:	+14°F to 176°F (-10°C to +80°C)
System Operating Temperature:	-13°F to 115°F (-25°C to +45°C)
Storage Temperature:	-13°F to 115°F (-25°C to +45°C)
Relative Humidity:	95% max. – non condensing
Waterproof:	Probe and distal end up to 14,7 psi (1 bar- 10,2 m H2O)(not 6mmSVTA)
Hazardous Environments:	Not rated for use in hazardous environments

INTERCHANGABLE OBJECTIVE LENSES & SVTA

Probe	DOV	FOV	DOF	CODE	ART. NR.
4.0mm	0°	60°	7-50mm		–
4.0mm	0°	60°	4-10mm	CF	–
4.0mm	0°	90°	15mm-∞		–
4.0mm	0°	90°	10-30mm	CF	–
4.0mm**	90°	60°	5-45mm	SVTA	930-00100-0005
6.0mm	0°	60°	5mm-∞	BLACK	930-00100-0002
6,0mm	0°	60°	5mm-∞	GOLD-B	930-00200-0014
6.0mm	0°	90°	5mm-∞	RED	930-00200-0006
6.0mm**	90°	60°	5-15mm	SVTA-CF	930-00100-0002
6.0mm**	90°	60°	15-50mm	SVTA-FF	930-00100-0003
8.0mm	0°	28° 2	5mm-∞	BLUE	930-00200-0004
8.0mm	0°	60°	8mm-∞	GOLD-B	930-00200-0009
8.0mm	0°	60°	10mm-∞	BLACK	930-00200-0003
8.0mm	0°	90°	5mm-∞	SILVER-B	930-00200-0002
8.0mm	0°	90°	5mm-∞	RED	930-00200-0001
8.0mm**	90°	60°	5mm-∞	SVTA	930-00100-0001

DOV = Direction of view
FOV = Field of view
DOF = Depth of focus
SVTA = Side view tip adapter

CF = close Focus
FF = far Focus
B = Bright objective lens
** Compatible with FOV60 °

* Note: The articulation angle of the video probe may vary due to the length-diametercombination. Custom build versions and special endoscopes on request.

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